

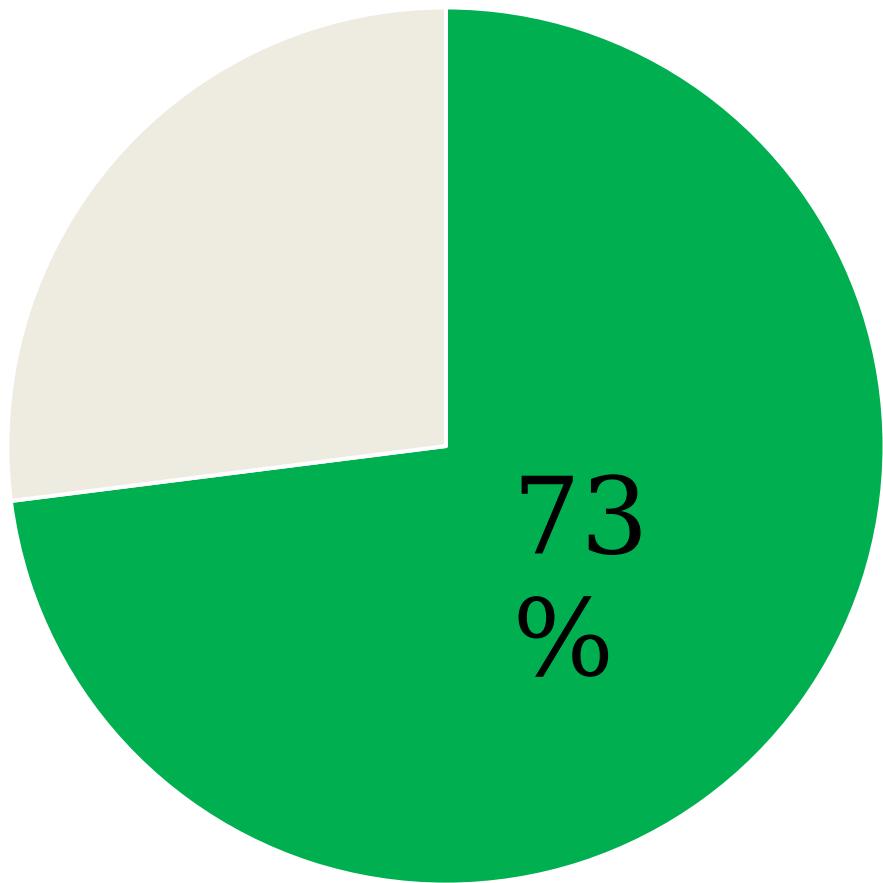
# The Market for Green Products

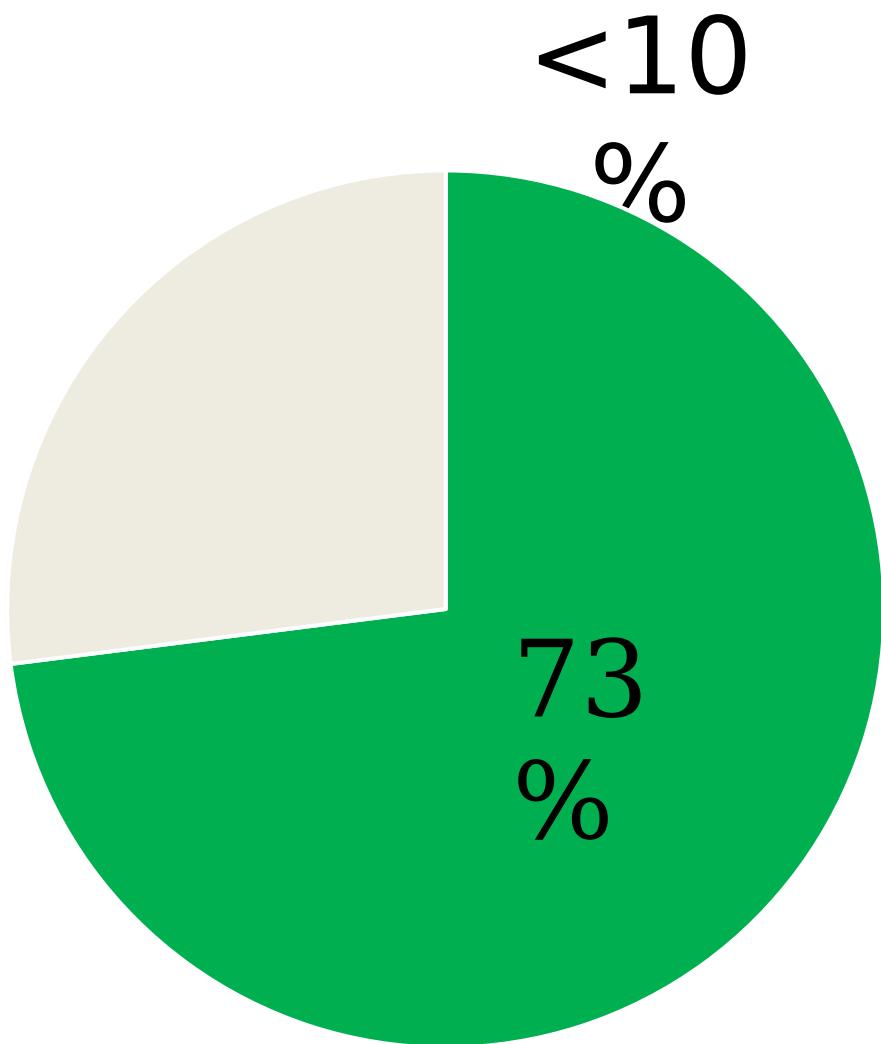
Business and the Environment

Magali Delmas  
UCLA











# Green consumer categories

Dark Green Consumers	Light Green Consumers	Excuse-makers	Brown Consumers
<ul style="list-style-type: none"> <li>■ True Blue Greens, Greenback Greens (Coddington)</li> <li>■ Committed Environmentalist (McEachern; Glig et al.)</li> <li>■ Vocal Activists, Principled Pioneers (Tiltman)</li> <li>■ Addicts (Chitra)</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Sprouts</i> (Coddington)</li> <li>■ Conceivables (McEachern)</li> <li>■ Mainstream Environmentalists (Glig et al.)</li> <li>■ Conveniently Conscious (2007)</li> <li>■ Aspirants, Adjusters (2007)</li> </ul>	<ul style="list-style-type: none"> <li>■ Grouasers (Coddington)</li> <li>■ Non-believers, Buck-passers (Brown and Wahlers)</li> <li>■ Occasional Environmentalists (Glig et al)</li> </ul>	<ul style="list-style-type: none"> <li>■ Basic Browns (Coddington)</li> <li>■ Complacent (McEachern)</li> <li>■ Non-environmentalists (Glig et al.)</li> <li>■ Onlookers (Tiltman)</li> <li>■ Avoiders (Chitra)</li> </ul>

Dark Green  
Consumers



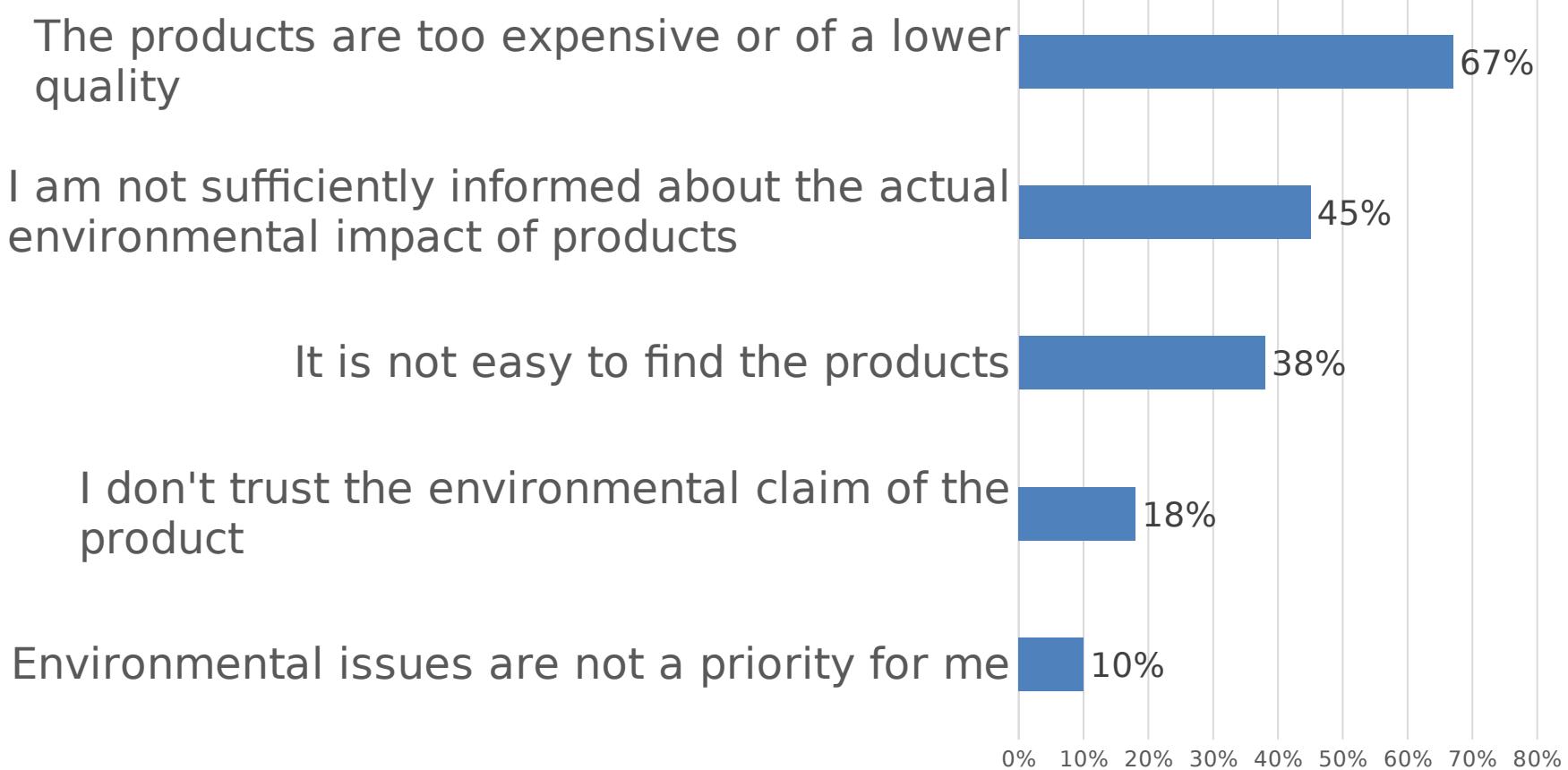
Brown  
Consumers



Convenient  
Environmentalis-  
ts



# The excuses...





CERTIFICATE NUMBER 9801  
[greenbusinesslogo.org](http://greenbusinesslogo.org)







**JUST DO IT.**

# The “Hobbit” shoe





Kia Rio  
\$15,000

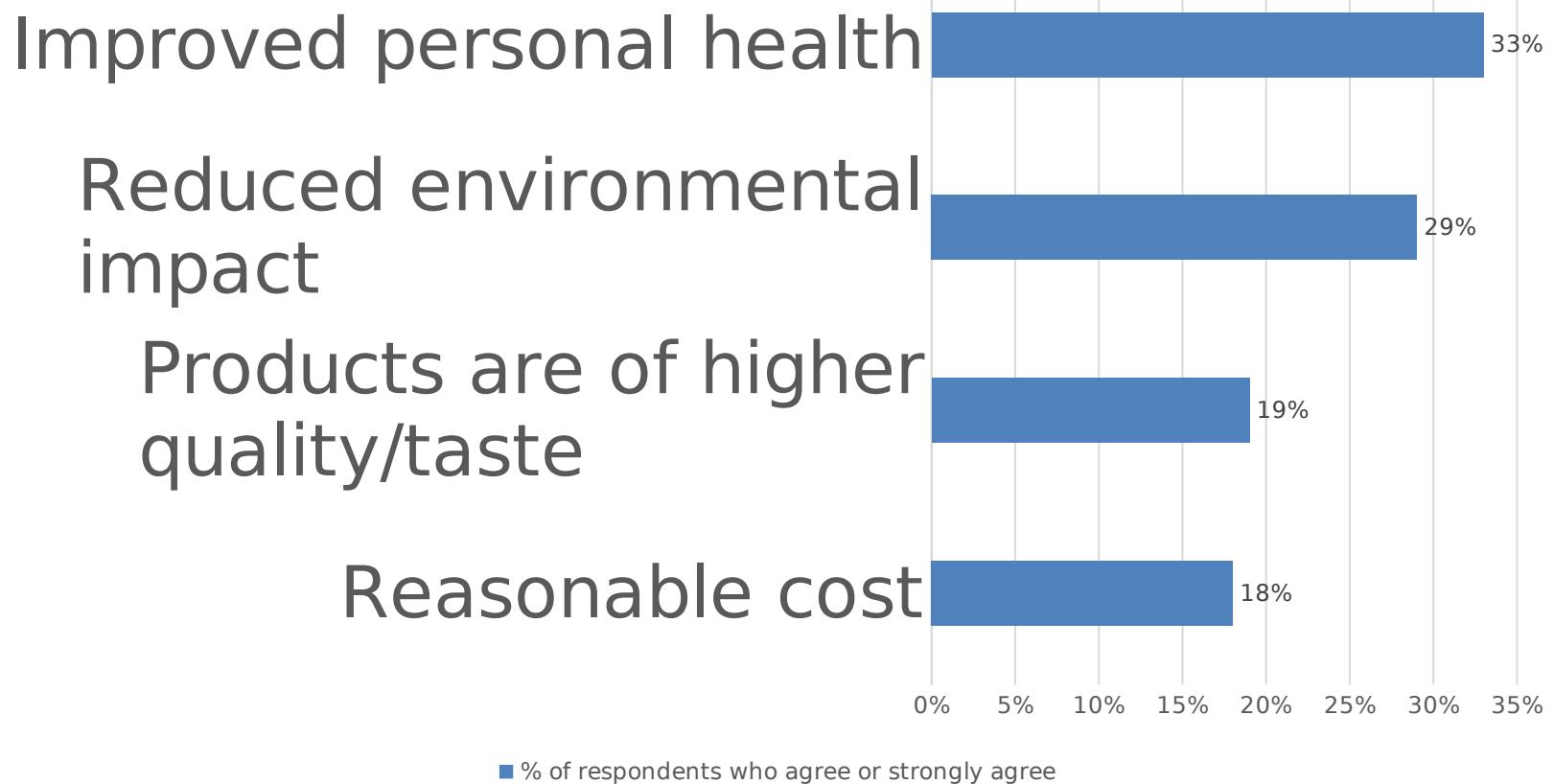


CODA  
\$37,400  
after tax  
savings

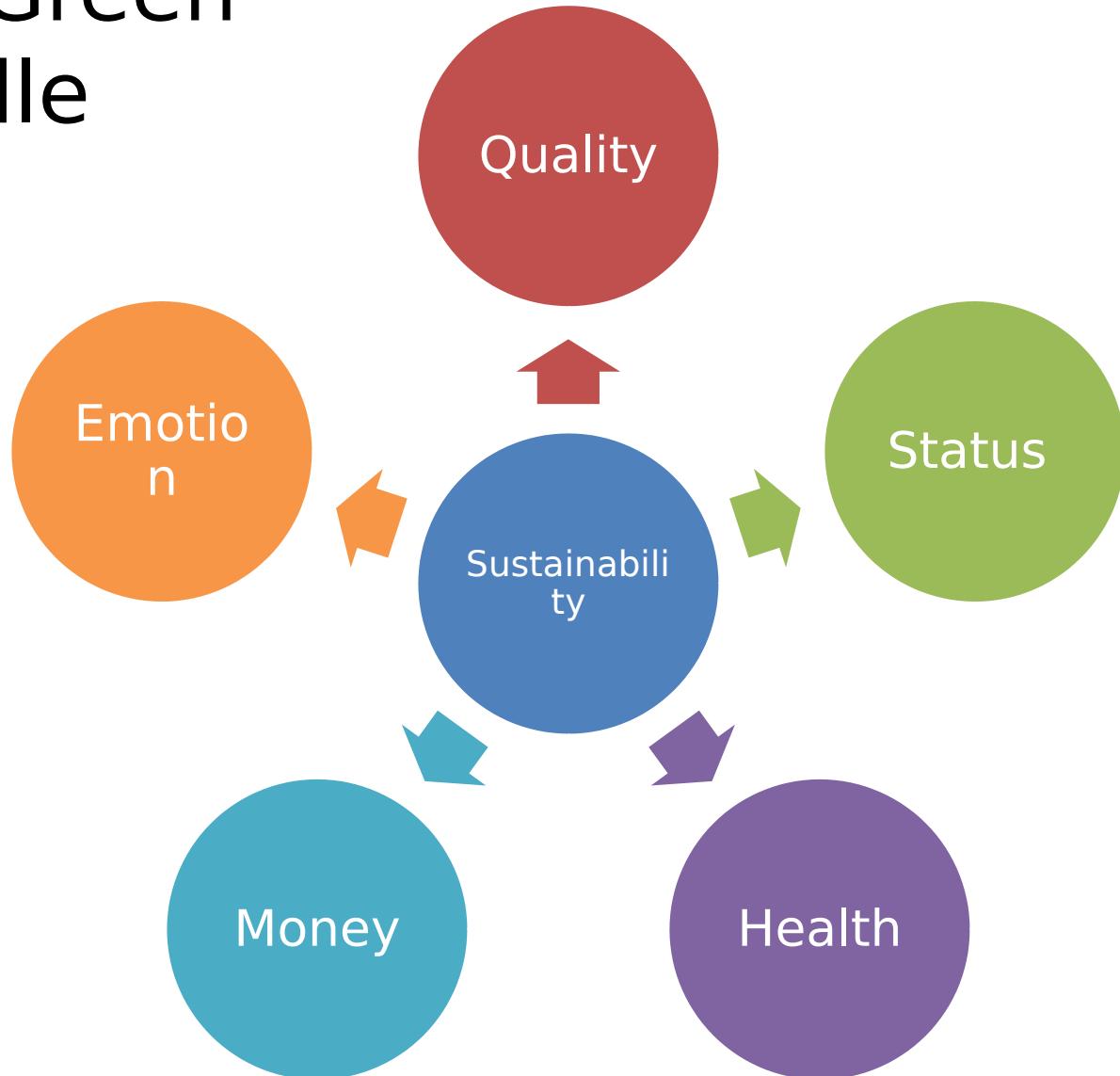


# Why purchase green products?

I buy environmental friendly products because...



# The Green Bundle



# The Green Bundle





“The Tesla S class is more efficient than a Prius, quicker than a Porsche 911, and has more cargo space than many SUVs.”

# Wine

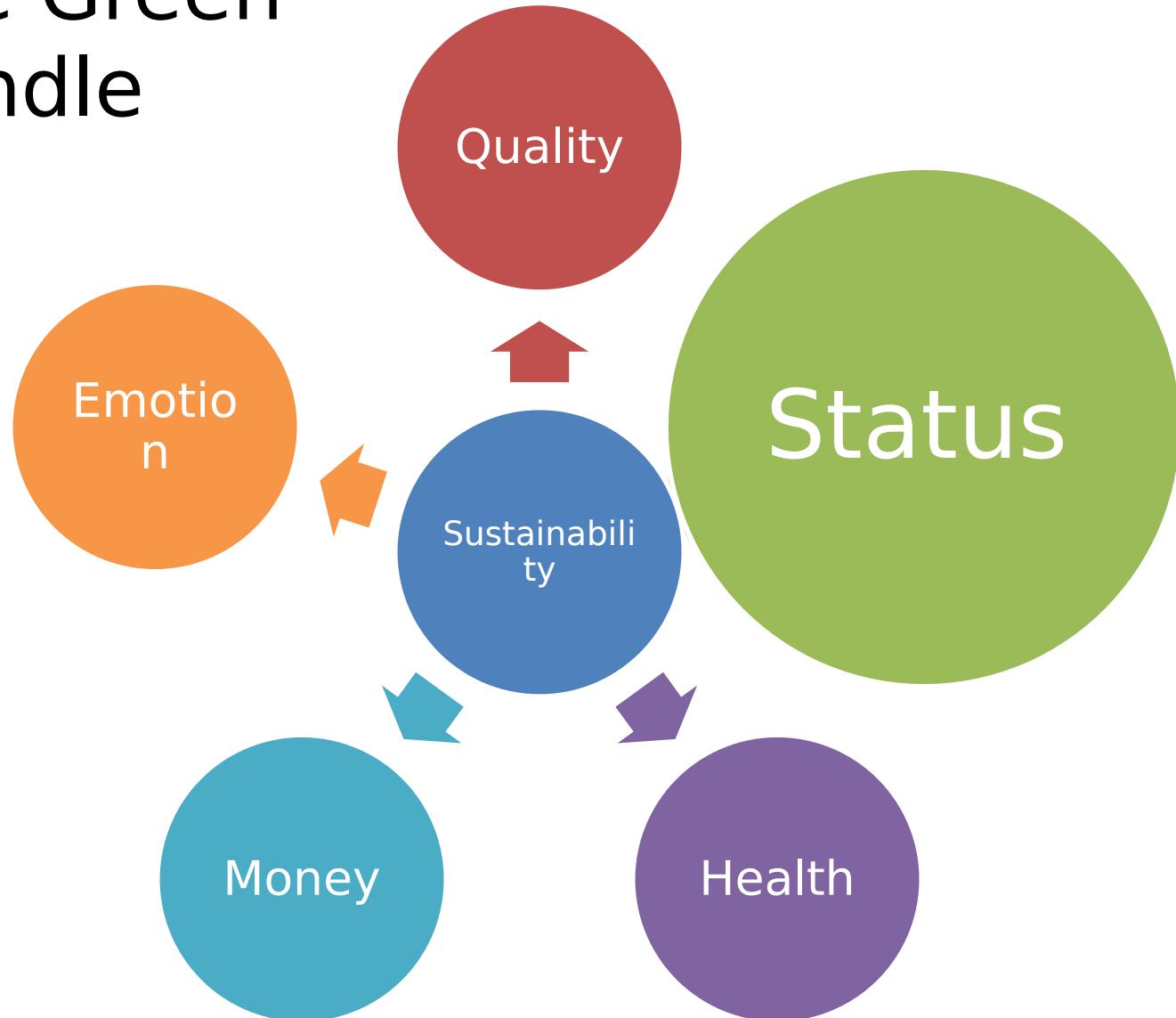


- Eco-certification associated with a ***price premium*** (13%) in the wine industry.
- Certified wines rated about 4 points higher than conventional wines by experts (Wine Spectator, Wine Enthusiast, Wine Advocate).





# The Green Bundle



You are currently using **0.081 kilowatts** of electricity.  
(updated 36 seconds ago)

This translates to **1.944 kilowatt-hours** a day.  
Your historical average is **7.267 kilowatt-hours** a day.

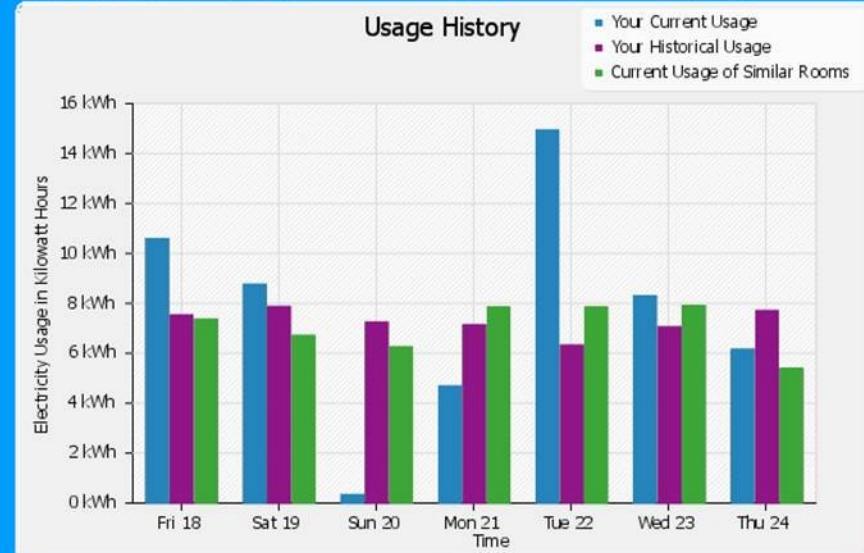
## Real-time energy use

Select Duration:

3 Hour

Daily

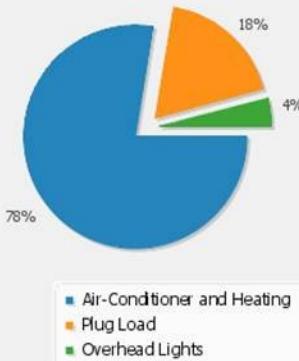
**Weekly**



[Refresh](#)

**Social and historical comparisons**

## Your Room's Average Power Usage by Source



**Energy usage by source**

# UCLA ENGAGE Energy Stars

- Above average energy saver: A green room used less energy than the average for all similar rooms \*
- Below average energy saver: A red room used more energy than the average for all similar rooms \*

Residence Plaza	Room	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Rieber Terrace	662A	Green	Green	Green	Green					
Rieber Vista	559B	Green	Red	Green	Green					
Summit	170F	Red	Red	Red	Red					
Summit	200	Red	Red	Red	Red					
Summit	225C	Green	Red	Red	Red					
Summit	225D	Green	Green	Green	Green					
Summit	270A	Green	Green	Green	Green					
Summit	325A	Red	Red	Red	Red					
Summit	325F	Green	Green	Green	Red					
Summit	325K	Green	Green	Green	Green					
Summit	425H	Green	Green	Green	Green					
Summit	425J	Green	Green	Green	Red					
Summit	460A	Red	Red	Red	Red					
Summit	460B	Red	Red	Red	Red					
Summit	560A	Red	Green	Green	Green					
Summit	650A	Red	Red	Red	Red					
Summit	650E	Green	Green	Green	Green					
Summit	650J	Red	Red	Red	Red					
Summit	656A	Green	Green	Green	Green					
Summit	800	Red	Red	Red	Red					
Summit	850D	Green	Green	Green	Green					
Summit	870H	Green	Green	Green	Green					

Participants in UCLA Engage volunteered to have electricity metering equipment have personalised online dashboards that show real-time and historical electricity. Engage have dashboards and not all are part of the Energy Star program. UCLA For more information go to <http://ewains38.ee.ucla.edu/~energy/engage/>

- All comparisons are with rooms of similar size and number of occupants. The energy usage for the average room is calculated as the average across all Engage participants, not just the Engage Energy Stars. This means that everybody in the Engage Energy Star program can conserve electricity and become an above average energy saver. The measurement in Engage Energy Stars is for electricity only, not heating, cooling, water, or lighting. Heating and cooling, power outlets, and numbered lights are all monitored.

# Beverly Hills put a spotlight on its celebrity water wasters

## Daily water usage

- Amy Poehler ■ Average US family
- WHO daily recommendation

2,800 gallons/day

2,100

1,400

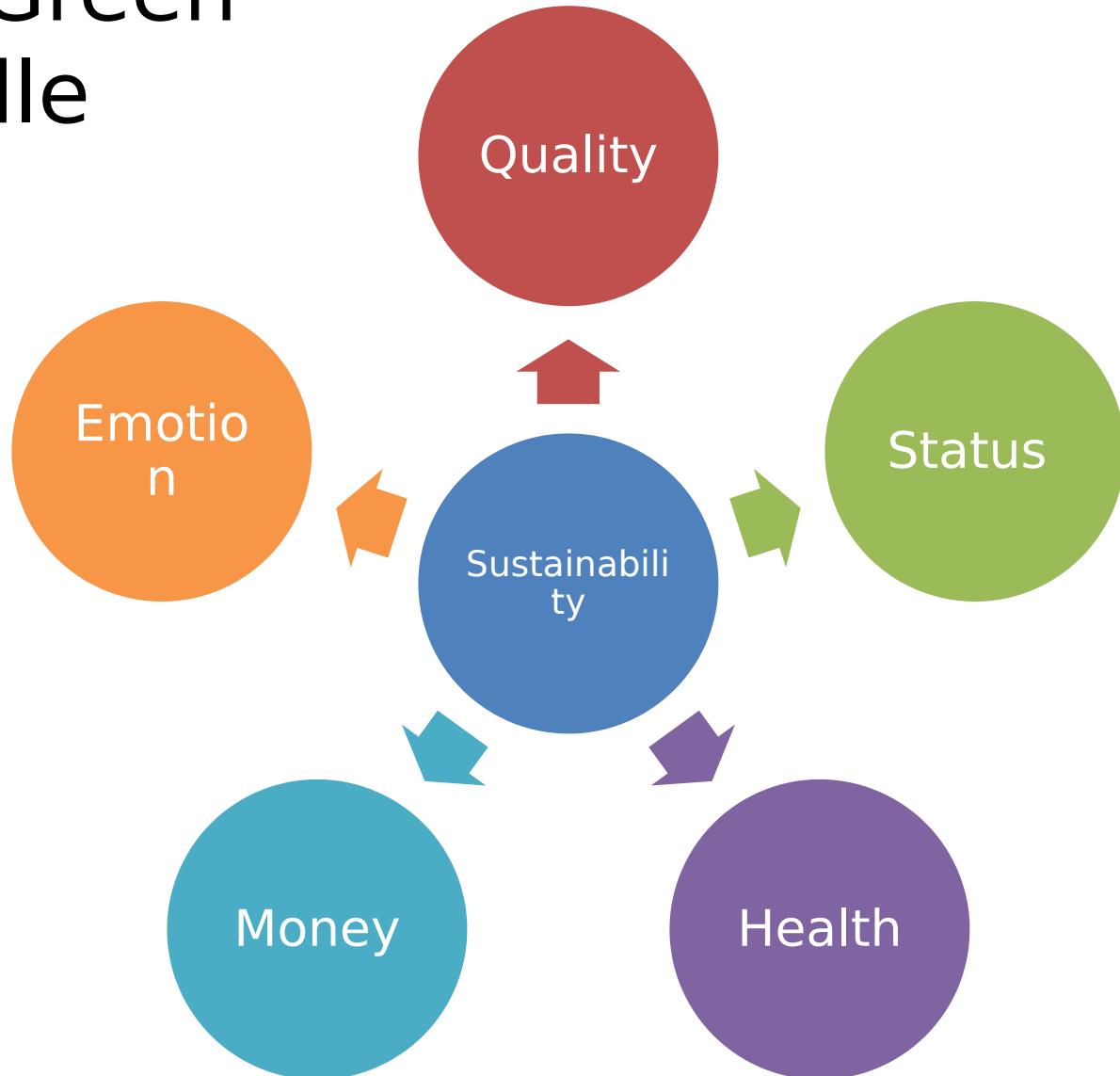
700

0

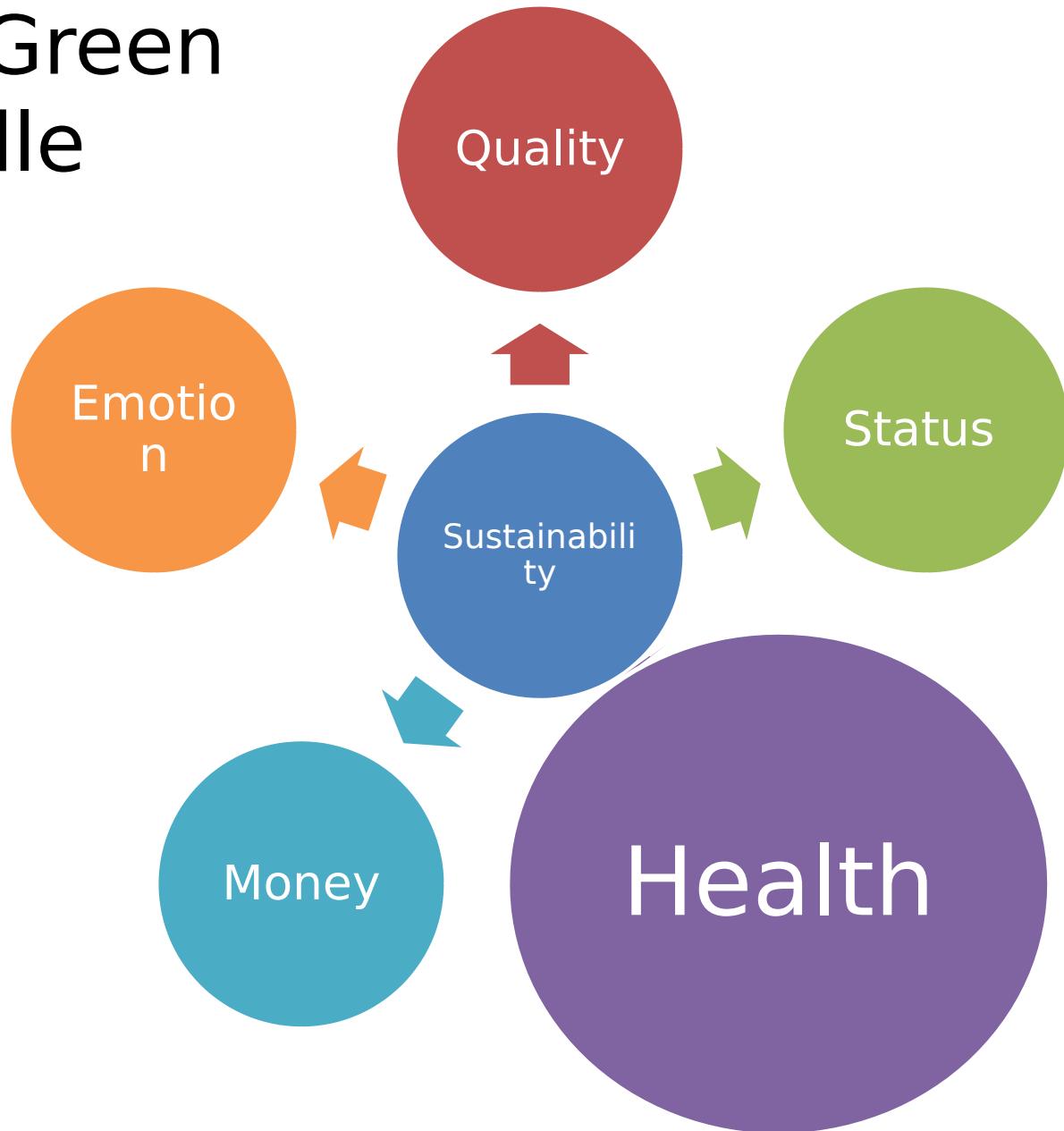




# The Green Bundle



# The Green Bundle





***Organic milk keeps kids healthy!***

Organic market doubled in the last decade



- Sixty-seven percent higher levels of vitamins and antioxidants
- Sixty percent more conjugated linoleic acids than regular milk
- Higher levels of good Omega-3s
- Lower levels of Omega-6s than conventional milk.

# LEED buildings



- Energy savings, Reduce stormwater runoff, increase groundwater recharge
- Healthier, more pleasant interior environment, improving productivity, reducing illness, bolstering recruitment and raising retention.
- Increase rent? Investment of \$4 per square foot in LEED building features adds about 50 cents per square foot to the annual rent.





## Your Impact

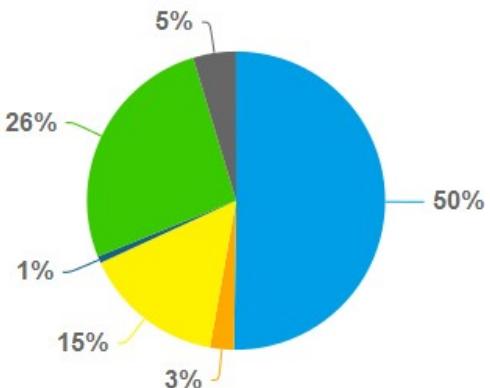
Last week you used **113% more** electricity than your efficient neighbors.  
You spend **\$112 more** over one year.

[Home](#)[Month](#)[Day](#)[Now](#)

### Your electricity usage for July 23, 2012 - July 29, 2012



### Usage by appliance



Click on the pie to see more details



# Money vs Health

**Information about cost of energy use**



**Information about impact of energy use on pollution and health**



# Money vs Health



## Your Impact

## Money

Last week you used **29% more** electricity than your efficient neighbors.  
You spend **\$26 more** for one year.

29% more  
\$26 more

VS



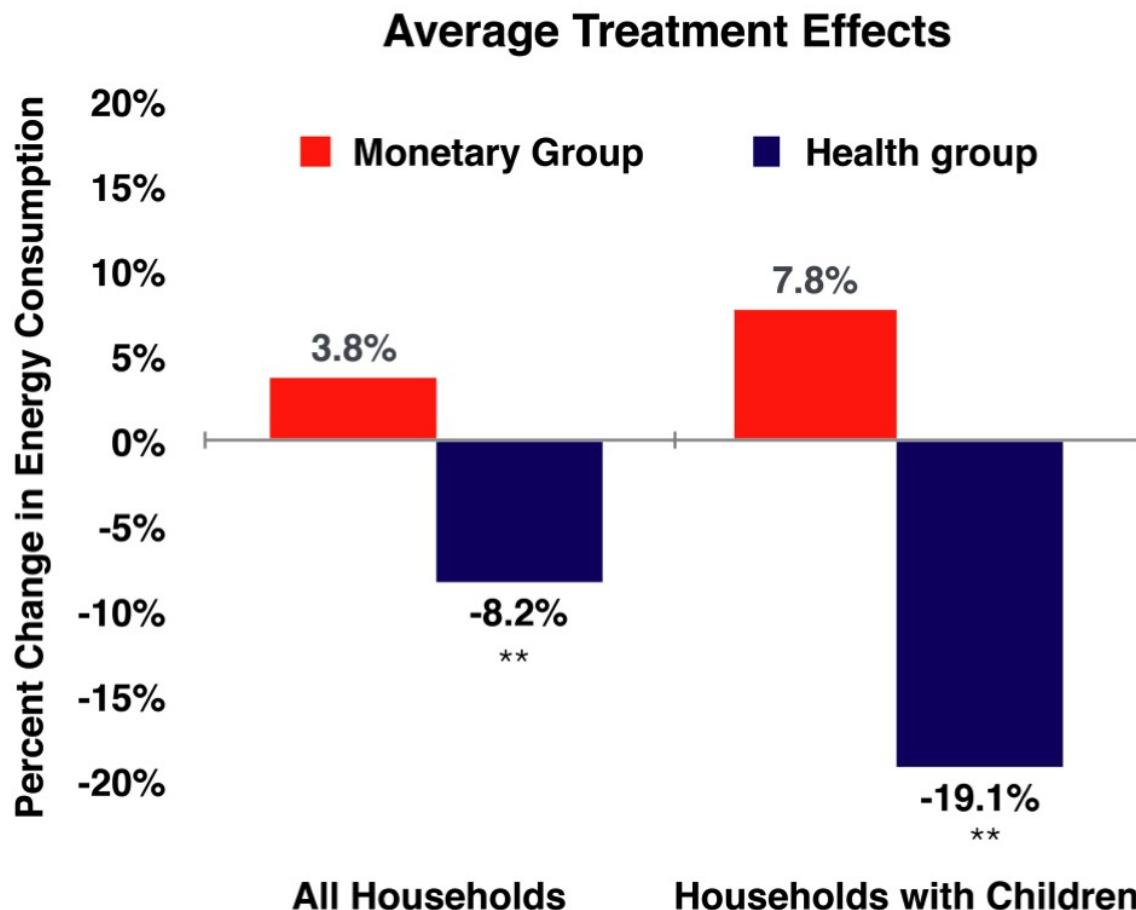
## Your Impact

## Health

Last week you used **29% more** electricity than your efficient neighbors.  
Over one year, you are **adding 456 pounds** of air pollutants which contribute to health impacts such as **childhood asthma and cancer**.

29% more  
adding 456 pounds  
childhood asthma and cancer

# Main Treatment Effects



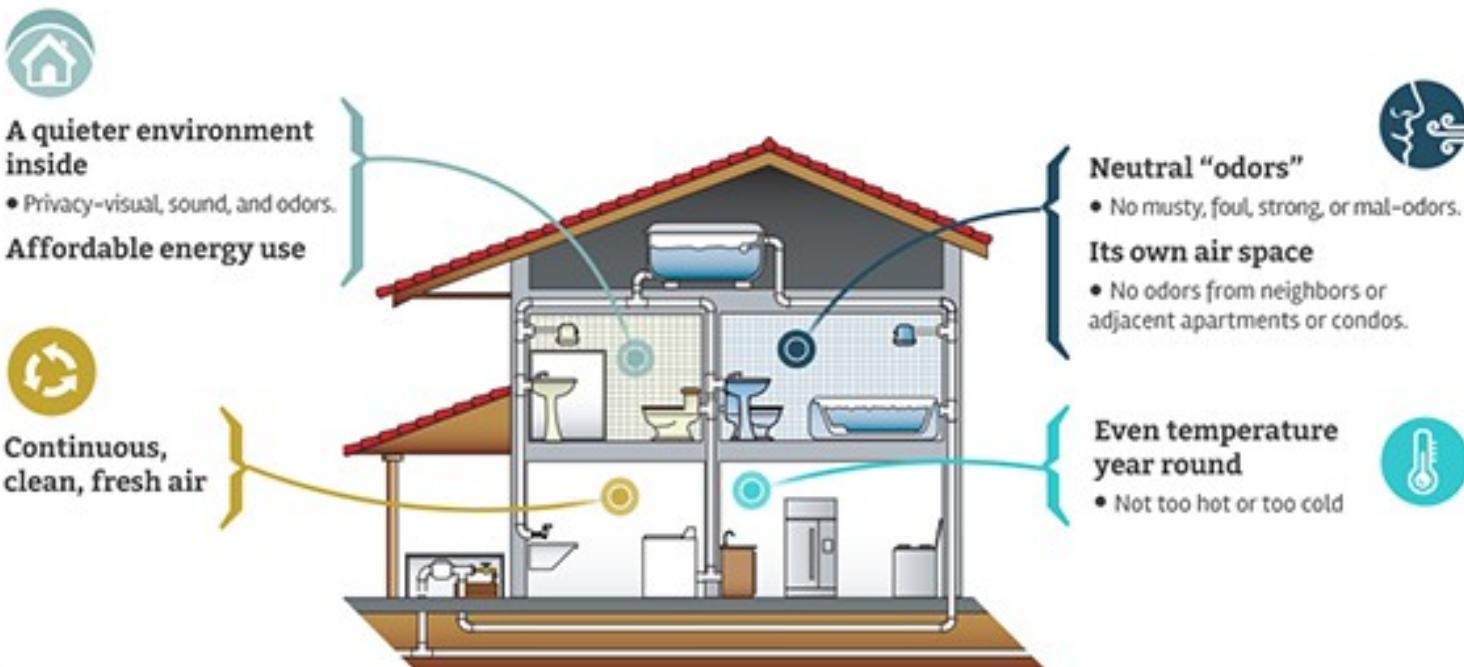
9 months  
N=490,994 hourly  
kWh observations  
118 apartments





# HAYWARD HEALTHY HOME™

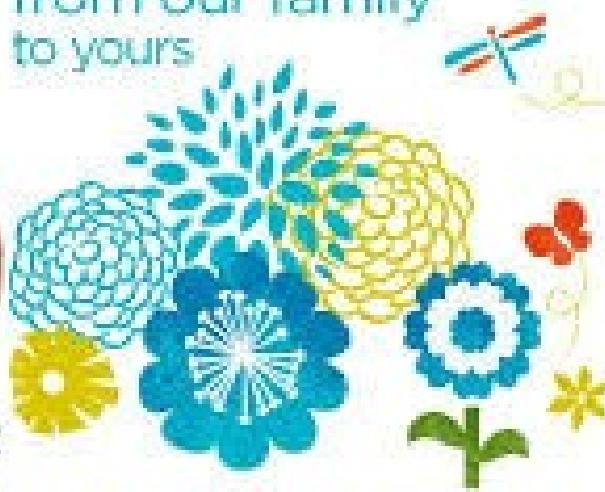
*A healthy home will last longer than an unhealthy home. It will be more energy efficient. Its occupants will take better care of it.*



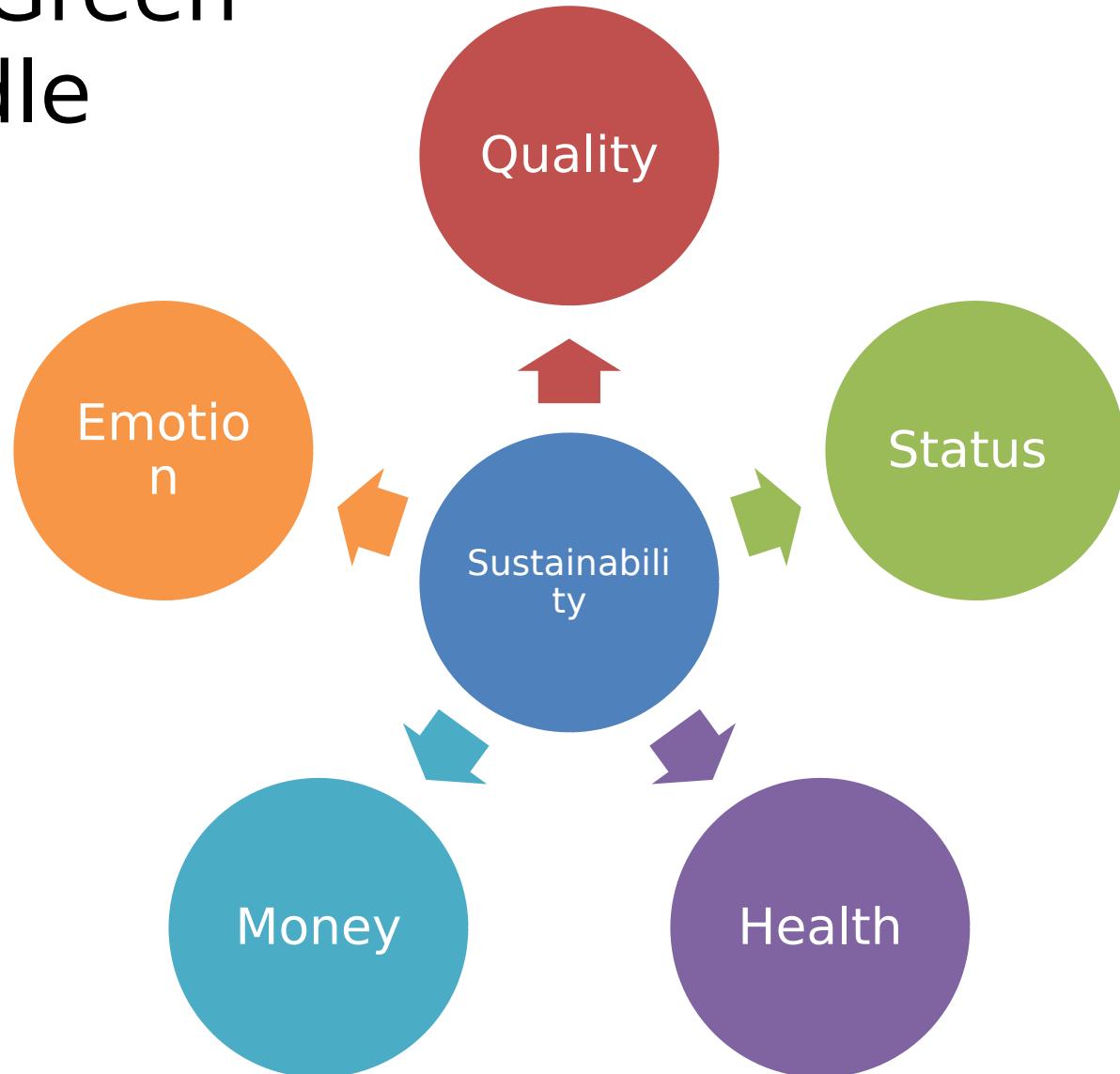


The Honest Company  
from our family  
to yours

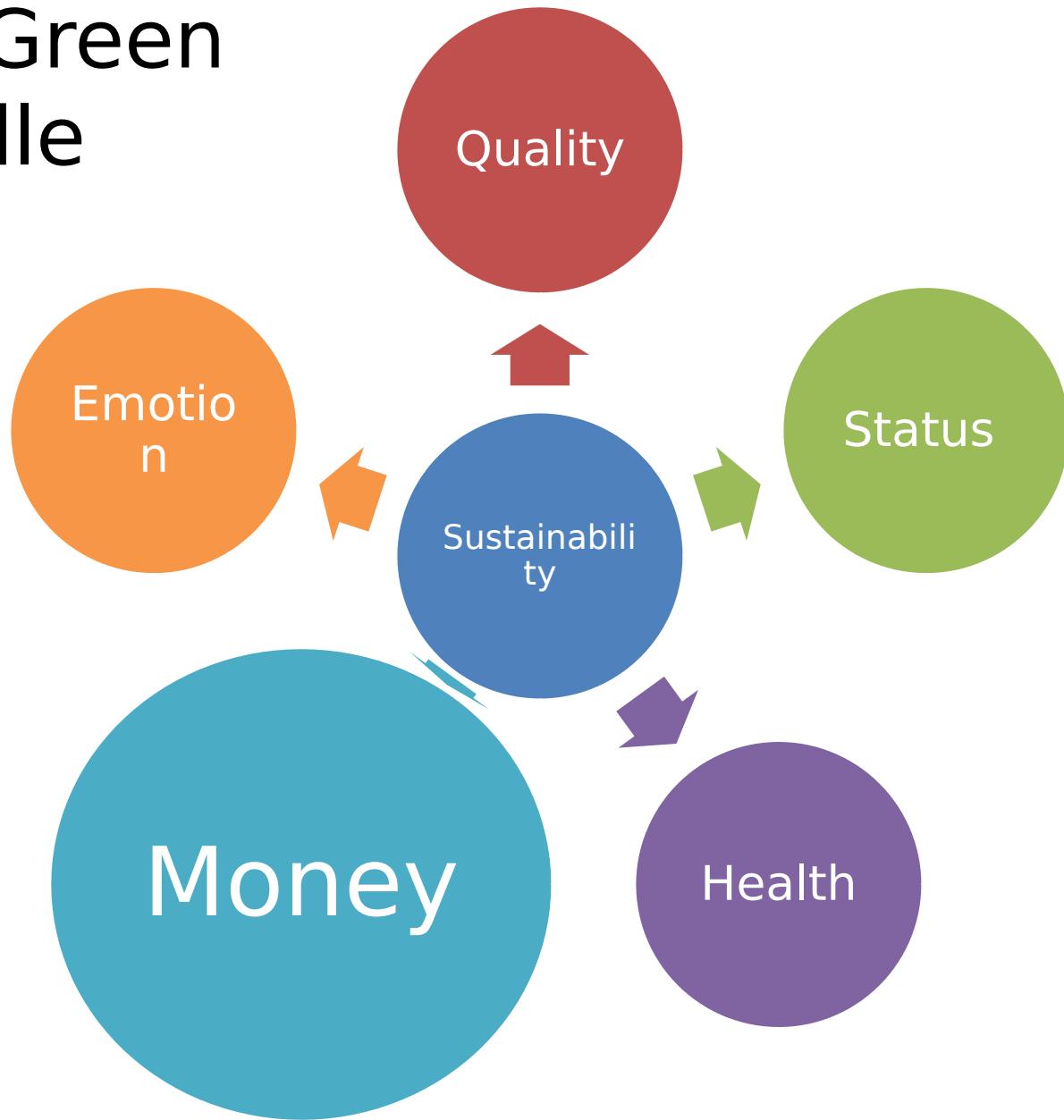
Jessica Alba  
Founder



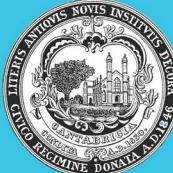
# The Green Bundle



# The Green Bundle



# Money

 **EFFECTIVE MARCH 31, 2016**

**BRING YOUR BAG.**  
Avoid the Cambridge mandatory bag charge.

  
Clean bags regularly to keep them germ-free.

**Minimum 10¢ CHARGE**  
on each checkout bag.

  
**compostable**

  
**recyclable**

# Cut cost in small pieces

	LOAN	CASH	LEASE	PPA
Down payment	\$0 down	Outright Purchase	\$0 down, full & partial prepay options	\$0 down, full & partial prepay options
Ownership	You	You	SolarCity	SolarCity
Tax credit(s)			NA	NA
Monthly payments	Fixed*	None	Low, fixed with a 0-2.9% annual escalator	Pay for the energy produced, with a 0-2.9% annual escalator
Production guarantee				
Energy monitoring with MySolarCity app				
Roof & system warranty				
Payment term	10 or 20 Years	Paid in full	20 Years	20 Years

<https://www.tesla.com/support/energy/solar-panels/learn/subscription-solar>

Utility

20.0¢

Avoided Utility Cost per kWh

With Solar

12.5¢

Effective Solar Cost per kWh\*

\$0

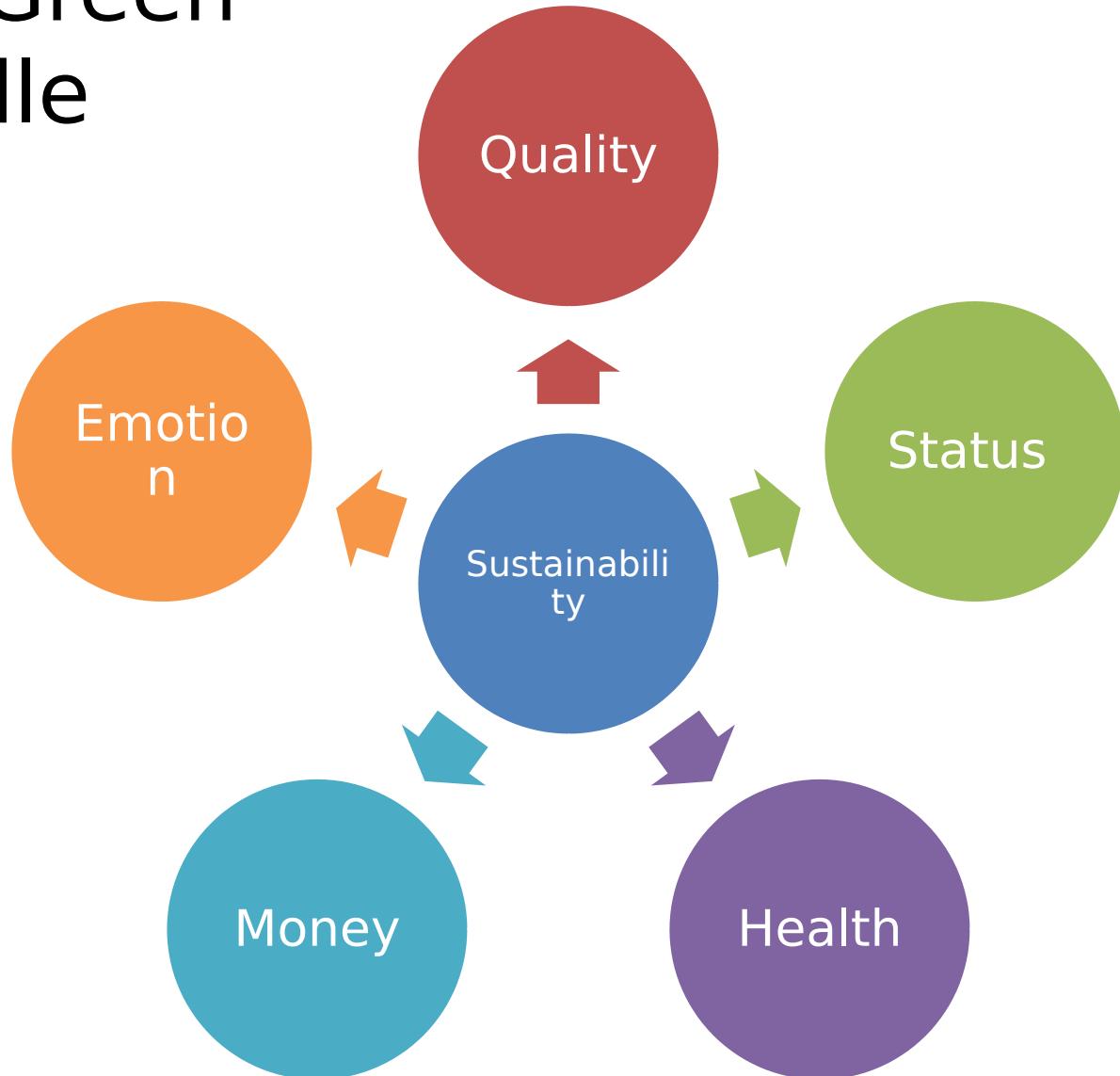
Upfront Cost (Installation Included)

- Your home will still be connected to the utility grid, so you'll still get bills from your utility. You'll need that power at night, but your overall energy costs should go down because you'll generate most of your own energy.
- You're locking in low, predictable energy costs. Your solar cost will only increase 2.90% every year. Utility rates tend to rise unpredictably every year. Increases vary, but are typically higher than your 2.90% increase. You can watch your savings grow over the next 20 years.

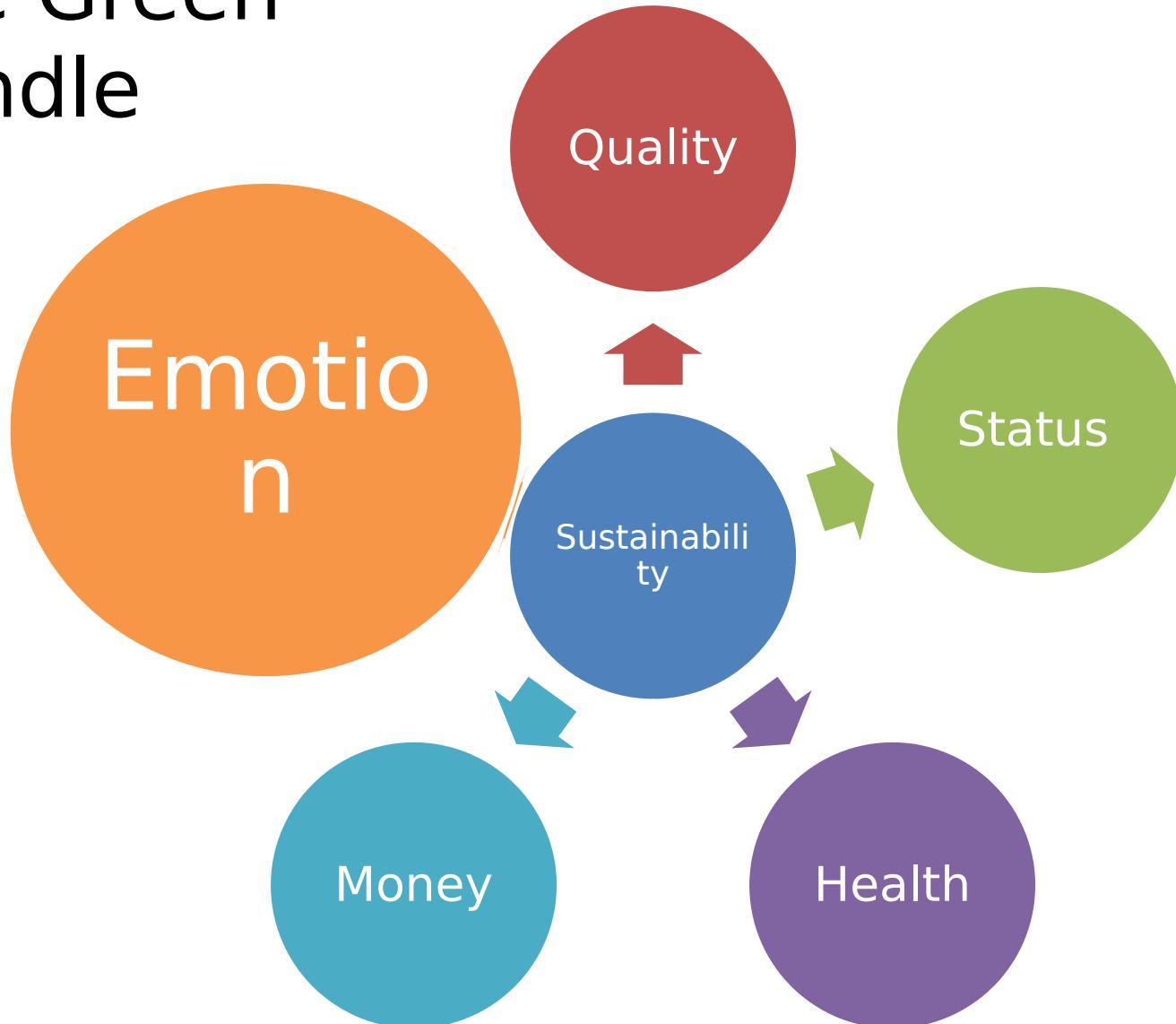
# The 3 Types of Residential Solar

LEASE	P.P.A.	OWNERSHIP
<p><b>Similar to a car lease</b></p> <p><b>The Good:</b></p> <ul style="list-style-type: none"><li>• Provides equipment and installation at no cost</li><li>• Company maintains and insures equipment</li><li>• No tax considerations to qualify</li></ul> <p><b>The Bad:</b></p> <ul style="list-style-type: none"><li>• Customer only gets a limited portion of the power bill savings each month</li><li>• Customer builds no equity in their system and gets very limited home value appreciation with a lease</li><li>• A built-in 2.99% escalator means your monthly power bill doubles over 25 years</li><li>• Very low production guarantee means savings aren't guaranteed</li><li>• Moving from the home is nearly impossible without finding a qualified, interested buyer to take over the lease payments</li></ul>	<p><b>Another form of lease</b></p> <p><b>The Good:</b></p> <ul style="list-style-type: none"><li>• Provides equipment and installation at no cost</li><li>• Company maintains and insures equipment</li><li>• No tax considerations to qualify</li></ul> <p><b>The Bad:</b></p> <ul style="list-style-type: none"><li>• Customer only gets a limited portion of the power bill savings each month</li><li>• Customer builds no equity in their system and gets very limited home value appreciation with a P.P.A.</li><li>• A built-in 2.99% escalator means your monthly power bill doubles over 25 years</li><li>• No production guarantee</li><li>• Moving from the home is nearly impossible without finding a qualified, interested buyer to take over the P.P.A. payments</li></ul>	<p><b>Best long term value for the customer</b></p> <p><b>The Good:</b></p> <ul style="list-style-type: none"><li>• You own it and get all the financial upside</li><li>• Turn a monthly power bill into building an asset</li><li>• Ownership is the only option that appreciates your home's value by any meaningful amount</li><li>• Your monthly payment is fixed for the life of the loan (no escalators like on a lease or P.P.A.)</li><li>• Once the loan is paid off enjoy years of free, clean energy</li><li>• You get all the tax credits</li></ul> <p><b>The Bad:</b></p> <ul style="list-style-type: none"><li>• Tax considerations to qualify</li></ul> 
		

# The Green Bundle



# The Green Bundle

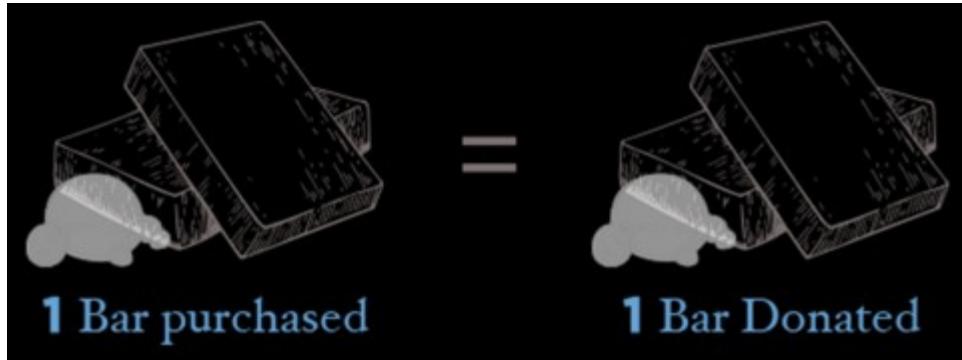


# Emotion/Empathy





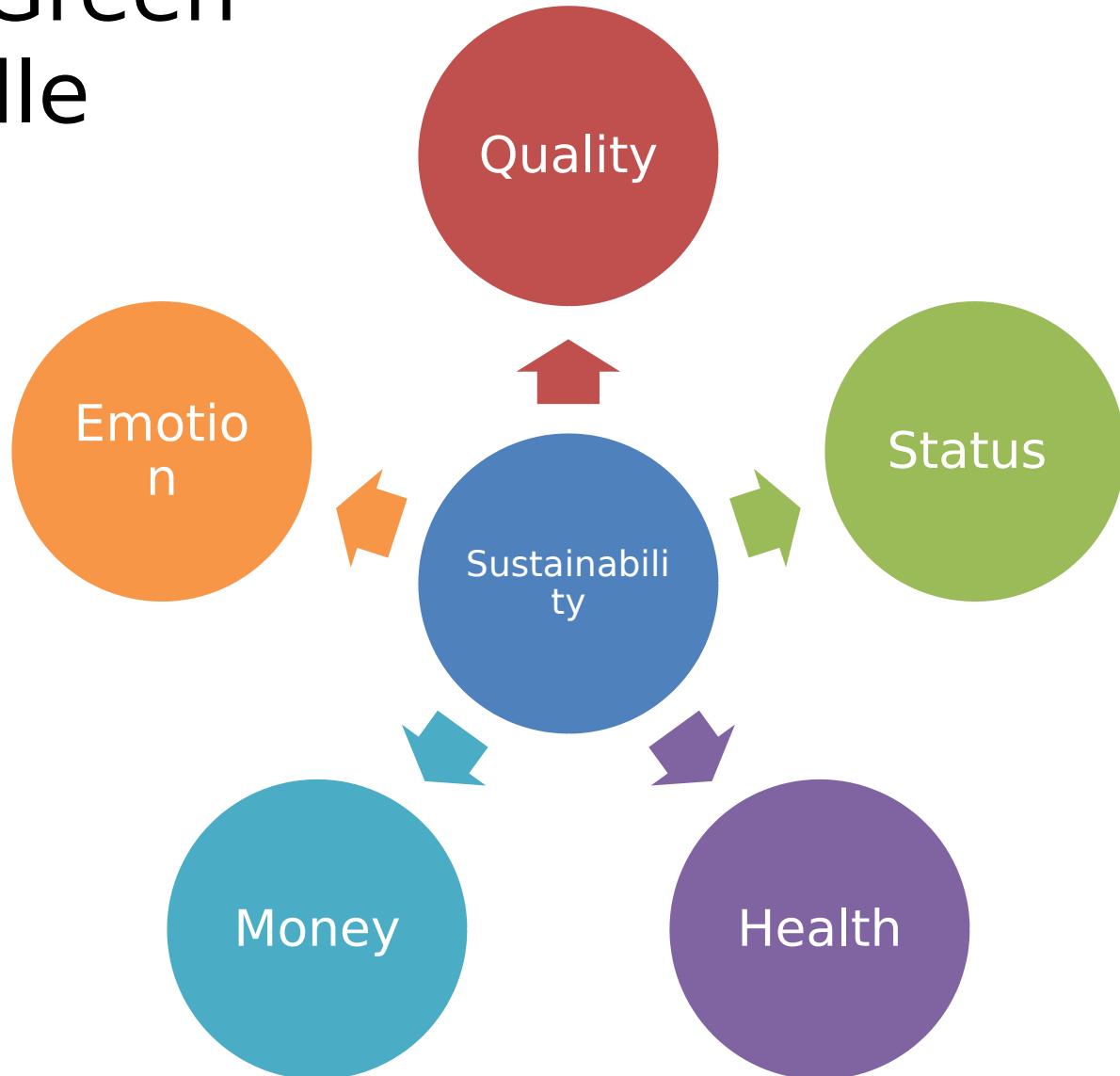
WARBY PARKER  
eyewear



**2,663,510** Bars Donated



# The Green Bundle



# When to bundle?

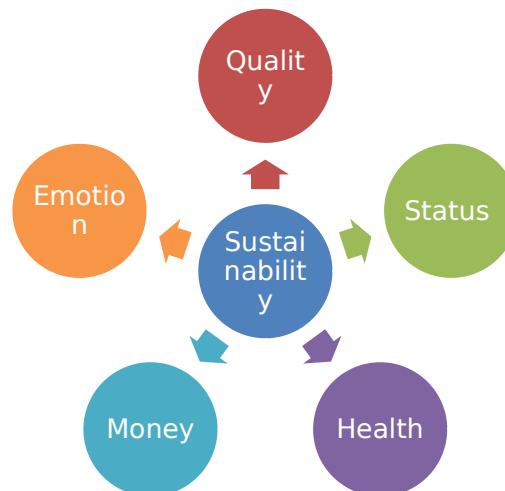
- Relevance of the benefits will vary with context
  - Connection with environmental damage and health most salient at critical junctures in the lives of consumers
  - Status associated with green depends on social group
- Silent bundle?

# The Green Bundle

Inform consumer on product environmental benefits

Frame message with private benefits to motivate behavior

Change consumption behavior



# Emotion

